

D. Scientific Inquiry			Level	
Research question	Variables and method	Evaluation		
You state a <b>clear</b> focused problem or research question <input type="checkbox"/> You <b>formulate a testable hypothesis</b> <input type="checkbox"/> You <b>explain</b> hypothesis using scientific reasoning <input type="checkbox"/>	You select <b>appropriate</b> materials and equipment and write <b>clear, logical</b> method <input type="checkbox"/> You mention <b>all of the relevant variables</b> involved and how to control and manipulate them <input type="checkbox"/> You <b>describe</b> how the data will be collected <input type="checkbox"/> You carry out experiment competently and effectively, with little guidance <input type="checkbox"/>	You <b>evaluate</b> the method, commenting on its reliability and/or validity <input type="checkbox"/> You <b>comment</b> on the validity of the hypothesis based on the outcome of the investigation <input type="checkbox"/> You suggest <b>realistic</b> improvements to the method <b>and</b> make suggestions for further inquiry when relevant <input type="checkbox"/>	5	6
You <b>state</b> a focused problem or research question <input type="checkbox"/> You <b>make a hypothesis</b> but do not explain it <input type="checkbox"/>	You select <b>appropriate</b> materials and equipment <input type="checkbox"/> You mention <b>some of the relevant variables</b> involved and how to control and manipulate them <input type="checkbox"/> Your method is <b>mostly complete</b> <input type="checkbox"/> You are unable to complete the experiment, unless guidance is given <input type="checkbox"/>	You <b>partially evaluate</b> the method <input type="checkbox"/> You <b>comment</b> on the validity of the hypothesis based on the outcome of the investigation <input type="checkbox"/> You <b>suggest some</b> improvements to the method <b>or</b> make suggestions for further inquiry when relevant <input type="checkbox"/>	3	4
You <b>attempt</b> to state a focused problem or research question <input type="checkbox"/>	Your method is <b>incomplete</b> <input type="checkbox"/> You are unable to complete the experiment <input type="checkbox"/>	You <b>attempt to evaluate</b> the method and respond to the focused problem or research question <input type="checkbox"/>	1	2
None of the above standards have been reached <input type="checkbox"/>			0	

E. Processing Data		Level	
Research question			
You organize, transform and present data in numerical and/or visual forms (tables, graphs and charts) <input type="checkbox"/>	You <b>describe</b> a trend, pattern or relationship in the data <input type="checkbox"/> You draw a <b>clear conclusion</b> based on the correct interpretation of the data <input type="checkbox"/> You <b>explain</b> the conclusion using <b>scientific reasoning</b> <input type="checkbox"/>	5	6
You collected sufficient relevant data and record it in a suitable format <input type="checkbox"/> You organize, transform and present data in numerical and/or visual forms (tables, graphs and charts), with <b>a few errors or omissions</b> <input type="checkbox"/>	You <b>state</b> the trend, pattern or relationship shown in the data <input type="checkbox"/> You draw a conclusion consistent with the interpretation of the data <input type="checkbox"/>	3	4
You <b>collect some</b> data and attempt to collect it in a suitable format <input type="checkbox"/> You <b>organize and present</b> data using simple numerical or visual forms <input type="checkbox"/>	You <b>attempt</b> to identify trend, pattern or relationship in the data <input type="checkbox"/> You <b>attempt</b> to draw a conclusion, but this is not consistent with the interpretation of the data <input type="checkbox"/>	1	2
None of the above standards have been reached <input type="checkbox"/>		0	

F. Attitude in Science			Level	
Using equipment	Safety & environment	Cooperation		
You use material and equipment <b>competently</b> <input type="checkbox"/> You return material and equipment cleaned and back to their intended location <input type="checkbox"/>	You <b>require no guidance</b> to work safely <input type="checkbox"/>	When working in a group you <b>cooperate</b> with others on all occasions <input type="checkbox"/> You <b>communicate effectively</b> with your partner <input type="checkbox"/>	5	6
You require <b>little assistance</b> when using material and equipment <input type="checkbox"/> You needed instructions to return material and equipment cleaned and back to their intended location <input type="checkbox"/>	You require <b>little guidance</b> to work safely <input type="checkbox"/> You work responsibly with regard to the living and non-living environment <input type="checkbox"/>	When working in a group you <b>cooperate</b> with others on <b>most</b> occasions <input type="checkbox"/> You need <b>some guidance</b> to communicate well with your partner <input type="checkbox"/>	3	4
You require <b>some assistance</b> when using material and equipment <input type="checkbox"/>	You <b>require some guidance</b> to work safely <input type="checkbox"/> You require <b>some guidance</b> to work responsibly with regard to the living and non-living environment <input type="checkbox"/>	When working in a group you need <b>frequent reminders</b> to <b>cooperate</b> with others <input type="checkbox"/> You have <b>difficulty communicating</b> with your partner, despite being guided <input type="checkbox"/>	1	2
None of the above standards have been reached <input type="checkbox"/>			0	